## WHAT IS CLAIMED IS:

- 1. A process for imparting an aesthetically-pleasing substantive fragrance to, and/or substantially removing a perceived malodour from one or more aqueous surfactant-containing composition-treated solid or semi-solid surfaces during treatment of said surfaces with one or more surfactant-containing compositions comprising the steps of:
  - i. providing a plurality of polymer particles (a) having a volume average diameter of from about 0.01 microns up to about 1000 microns; (b) having a solid or viscoelastic infrastructure which is composed of a substance selected from the group consisting of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units, an ethylcellulose polymer, a polystyrene polymer and a polymethyl methacrylate polymer, said polymers having a number average molecular weight of from about 8000 to about 1 x 10<sup>6</sup> and (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure surrounding a free volume;
  - ii. providing a surface treatment quantity of an aqueous composition comprising from about 1% to about 25% by weight of at least one surfactant which aqueous composition is designed to be in contact with said surfaces over a treatment period of time in a surface treatment concentration and temperature;
  - iii. providing treatment means for enabling treatment of said surfaces;
  - iv. introducing (a) said aqueous composition; (b) said surfaces; and (c) said plurality of particles into said treatment means;
  - v. engaging said treatment means for a treatment period of time at a treatment temperature;

-37-

vi. disengaging said treatment means;

- vii. removing said surfaces from said treatment means;
- viii. rinsing said surface; and
- ix. drying said surface

wherein fragrance components of fragrance compositions and malodour molecules are compatible with said polymers.

- 2. The process of claim 1 wherein each of the free volumes of each of the polymer particles provided is initially empty and, during storage or treatment of said surfaces, absorbs components from said aqueous surfactant-containing composition and effects deposition of said fragrance components onto said surfaces.
- 3. The process of claim 1 wherein each of the free volumes of each of the polymer particles provided is initially empty, and during treatment, encapsulates malodourous components from said surfaces.
- 4. A process for imparting an aesthetically-pleasing substantive fragrance to, and/or substantially removing a perceived malodour from one or more aqueous surfactant-containing composition-treated solid or semi-solid surfaces during treatment of said surfaces with one or more surfactant-containing compositions comprising the steps of:
  - i. providing a plurality of solid and/or viscoelastic polymer particles (a) having a volume average diameter of from about 0.01 microns to about 1000 microns; (b) having a solid infrastructure which is composed of a substance selected from the group consisting of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units, an ethylcellulose polymer, a polystyrene polymer and a polymethyl methacrylate polymer, each of said polymers having a number average molecular weight of from about 8000 to about 1 x 10<sup>6</sup> and

- (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure surrounding a free volume;
- ii. admixing said solid or viscoelastic polymer particles with solid phase surfactant particles whereby a polymer-surfactant mixture is formed;
- iii. admixing the resulting polymer-surfactant mixture with water thereby forming an aqueous surfactant composition comprising from about 1% to about 25% by weight of said surfactant which aqueous composition is designed to be in contact with said surfaces over a treatment period of time in a surface treatment concentration and temperature;
- iv. providing treatment means for enabling treatment of said surfaces;
- v. introducing (a) said aqueous surfactant composition and (b) said surfaces into said treatment means;

vi.

- vii. engaging said treatment means for a treatment period of time at a treatment temperature;
- viii. disengaging said treatment means;
- ix. removing said surfaces from said treatment means;
- x. rinsing said surface; and
- xi. drying said surface

wherein fragrance components and malodour components are compatible with said polymers.

- 5. The process of claim 4 wherein each of the free volumes of each of the polymer particles provided is initially empty and, during storage or treatment of said surfaces, encapsulates components from said aqueous surfactant-containing composition and effects deposition of said fragrance components onto said surfaces.
- 6. The process of claim 4 wherein each of the free volumes of each of the polymer particles provided is initially empty, and during treatment, absorbs malodourous components from said surfaces.
- 7. The process of claim 4 wherein said surface is selected from the group consisting of a fabric surface and a hair follicle surface and said treatment is a washing treatment.
- 8. The process of claim 4 wherein said surface is a fabric surface, said surfactant is a detergent and said treatment is a washing treatment.
- 9. The process of claim 1 for imparting an aesthetically-pleasing substantive fragrance to and/or substantially eliminating a perceived malodour from aqueous surfactant-containing composition-treated fabrics, hair follicles, mammalian epidermis or solid surfaces during treatment of said fabrics, hair follicles, mammalian epidermis or solid surfaces with surfactant-containing compositions comprising the steps of:
  - i. providing a plurality of polymer particles (a) having a volume average diameter of from about 0.01 microns to about 1000 microns, (b) having a solid or viscoelastic infrastructure which is composed of a substance selected from the group consisting of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units, a polystyrene polymer, a polymethyl methacrylate polymer and an ethylcellulose polymer, each of said polymers having a number average molecular weight of from about 8000 to about  $1 \times 10^6$  and (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure having an internal free volume containing a liquid phase fragrance material removably entrapped in said infrastructure, contained in the

interstices of said infrastructure and outwardly transportable from said infrastructure, each of the components of which fragrance material having a C log<sub>10</sub> P in the range of from about 1 to about 7, the initial weight % of fragrance material contained in said plurality of polymer particles being from about 0.5% to about 50% by weight of the plurality of polymer particles, each of said fragrance components being compatible with said polymer;

- ii. providing a fabric, hair follicle, mammalian epidermis or solid surface treatment quantity of an aqueous composition comprising from about 1% to about 25% by weight of at least one surfactant which aqueous composition is designed to be in intimate treatment contact with, in the alternative, (a) at least one fabric article over a fabric treatment period of time in a fabric treatment concentration and temperature; or (b) at least one solid surface over a solid surface treatment period of time in a solid surface treatment concentration and temperature; or (c) at least one hair follicle over a hair follicle treatment period of time in a hair follicle treatment concentration and temperature or (d) a mammalian epidermis surface over a mammalian epidermis surface treatment period of time in a mammalian epidermis surface treatment concentration and temperature;
- iii. providing treatment means for enabling treatment of said fabrics, said hair follicles, said mammalian epidermis or said solid surfaces;
- iv. introducing (a) said aqueous composition; (b) said at least one fabric article, said at least one hair follicle, said at least one mammalian epidermis or said at least one solid surface; and (c) said plurality of polymer particles into said treatment means;
- v. engaging said treatment means for a treatment period of time at a treatment temperature;
- vi. disengaging said treatment means;

- vii. removing (a) said at least one fabric article or (b) said at least one solid surface or (c) said hair follicles or (d) said mammalian epidermis surface from said treatment means;
- viii. rinsing (a) said at least one fabric article or (b) said at least one solid surface or (c) said hair follicles or (d) said mammalian epidermis surface; and
- ix. drying (a) said at least one fabric article or (b) said at least one solid surface or (c) said hair follicles or (d) said mammalian epidermis surface

wherein fragrance components and malodour molecules are compatible with said polymers.

- 10. The process of claim 9 wherein said treatment is a cleaning treatment.
- 11. The process of claim 10 wherein said polymer particle infrastructure is composed of an ethylene-vinyl acetate copolymer.
- 12. The process of claim 9 wherein the treatment means is a laundry washing machine, and the process is for imparting an aesthetically-pleasing fragrance to and substantially removing a perceived malodour from aqueous surfactant-containing composition-treated fabrics.
- 13. The process of claim 12 wherein said polymer particle infrastructure is composed of an ethylene-vinyl acetate copolymer.

14. The process of claim 9 operated according to the mathematical model system:

$$m_{P} \int_{0}^{\theta} \left( \frac{\partial C_{P}}{\partial \theta} \right)_{C_{S}, C_{W}} d\theta + m_{W} \int_{0}^{\theta} \left( \frac{\partial C_{W}}{\partial \theta} \right)_{C_{P}, C_{S}} d\theta + m_{S} \int_{0}^{\theta} \left( \frac{\partial C_{S}}{\partial \theta} \right)_{C_{P}, C_{W}} d\theta = C_{T} m_{T} \text{ for the fragrance}$$

composition; and

$$\sum_{i=1}^{n} \left( m_p C_{pi} + m_{wi} C_{wi} + m_s C_{si} \right) = C_T m_T \text{ for "n" individual fragrance components wherein } 1 \le i \le n ;$$

wherein  $\theta$  represents time in hours;

wherein C<sub>P</sub> represents the fragrance concentration in the polymer particle in grams/liter;

wherein  $\frac{\partial C_p}{\partial \theta}$  represents the partial derivative of fragrance concentration in the polymer particle with respect to time, measures in grams/liter-hour;

wherein C<sub>w</sub> represents the fragrance concentration in the water phase in grams/liter;

wherein  $\frac{\partial C_w}{\partial \theta}$  represents the partial derivative of fragrance concentration in the water phase with respect to time measured in grams/liter-hour;

wherein C<sub>S</sub> represents the fragrance concentration in the surfactant phase in grams/liter;

wherein  $\frac{\partial C_s}{\partial \theta}$  represents the partial derivative of fragrance concentration in the surfactant phase with respect to time measured in grams/liter-hour;

wherein  $C_T$  represents the total concentration of fragrance in the system in grams/liter; wherein  $m_P$  represents the mass of the polymer particles in grams;

wherein m<sub>S</sub> represents the surfactant mass in grams;

wherein mw represents the water mass in grams; and

wherein  $m_T$  represents the total system mass in gramswith all terms being measured at a point in time,  $\theta$ .

15. The process of claim 14 wherein in the mathematical model:

$$m_{P} \int_{0}^{\theta} \left( \frac{\partial C_{P}}{\partial \theta} \right)_{C_{S}, C_{W}} d\theta + m_{W} \int_{0}^{\theta} \left( \frac{\partial C_{W}}{\partial \theta} \right)_{C_{P}, C_{S}} d\theta + m_{S} \int_{0}^{\theta} \left( \frac{\partial C_{S}}{\partial \theta} \right)_{C_{P}, C_{W}} d\theta = C_{T} m_{T}$$

 $C_P = -k_1 LN(\theta+1) + k_2$  with  $0.015 \ge k_1 \ge 0.03$  and  $0.18 \ge k_2 \ge 0.22$ ;

$$C_S = k_3 LN(\theta+1) + k_4$$
 with 1.5 x  $10^{-3} \ge k_3 \ge 2.2$  x  $10^{-3}$  and 1.2 x  $10^{-4} \ge k_4 \ge 2.0$  x  $10^{-4}$ ; and

$$C_W = k_5 LN(\theta+1) + k_6$$
  
with 1.5 x  $10^{-6} \ge k_5 \ge 3.0$  x  $10^{-6}$  and 1.5 x  $10^{-7} \ge k_6 \ge 3.0$  x  $10^{-7}$ 

- 16. The process of claim 9 wherein the plurality of polymer particles is produced by a process comprising the sequential steps of (a) blending polymer pellets with fragrance material for a period of time of from about 0.05 hours to about 20 hours; (b) extruding the resulting product at a temperature of from about 130°C to about 170°C to form an extrudate; (c) cooling the resulting extrudate to a temperature in the range of from about 15°C to about 40°C and (d) cryogrinding the resulting extrudate to form cryoground particles.
- 17. The process of claim 9 wherein the plurality of polymer particles is produced by a process comprising the sequential steps of (a) blending polymer pellets with silicon dioxide and fragrance material for a period of time of from about 0.05 hours to about 20 hours; (b) extruding the resulting product at a temperature of from about 130°C to about 170°C to form an extrudate; (c) cooling the resulting extrudate to a temperature in the range of from about 15°C to about 40°C and (d) cryogrinding the resulting extrudate to form cryoground particles.

- 18. The process of claim 9 wherein the plurality of polymer particles is produced by a process comprising the sequential steps of (a) extruding polymer pellets with one or more foam forming agents to from a foamed extrudate; (b) cooling the resulting extrudate to form an extrudate tow; (c) particularizing the resulting tow to form microporous polymer particles; and (d) admixing the resulting particles with a fragrance composition, the components of which are compatible with the polymer.
- 19. A process for imparting an aesthetically-pleasing substantive fragrance to and/or substantially removing a perceived malodour from aqueous surfactant-containing composition-treated fabrics, hair follicles, mammalian epidermis or solid surfaces during treatment of said fabrics or hair follicles or mammalian epidermis or said solid surfaces with surfactant-containing compositions comprising the steps of:
  - i. providing a first plurality of polymer particles (a) having a volume average diameter of from about 0.01 microns to about 1000 microns, (b) having a solid or viscoelastic infrastructure which is composed of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units and having a number average molecular weight of from about 8000 to about 1 x 10<sup>6</sup> and (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure having a free volume containing a liquid phase fragrance material removably entrapped in said infrastructure, contained in the interstices of said infrastructure and outwardly transportable from said infrastructure, each of the components of which fragrance material having a C log<sub>10</sub> P in the range of from about 1 to about 7, the initial weight % of fragrance material contained in said plurality of polymer particles being from about 0.5% to about 50% by weight of the plurality of polymer particles, each of said fragrance components being compatible with said polymer;
  - ii. providing a second plurality of polymer particles (a) having a volume average diameter of from about 0.01microns to about 1000 microns, (b) having a solid or viscoelastic infrastructure which is composed of an ethylcellulose polymer having a

number average molecular weight of from about 8000 to about 1 x 10<sup>6</sup> and (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure surrounding a liquid phase fragrance material removably entrapped in said infrastructure, contained in the interstices of said infrastructure and outwardly transportable from said infrastructure, each of the components of which fragrance material having a C log<sub>10</sub> P in the range of from about 1 to about 7, the initial weight % of fragrance material contained in said plurality of polymer particles being from about 0.5% to about 50% by weight of the plurality of polymer particles;

- iii. mixing said first plurality of polymer particles with said second plurality of polymer particles to form a third plurality of polymer particles;
- iv. providing a fabric, hair follicle, mammalian epidermis or solid surface treatment quantity of an aqueous composition comprising from about 1% to about 25% by weight of at least one surfactant which aqueous composition is designed to be in intimate treatment contact with either (a) at least one fabric article over a fabric treatment period of time in a fabric treatment concentration and temperature or (b) at least one solid surface over a solid surface treatment period of time in a solid surface treatment concentration and temperature or (c) at least one hair follicle over a hair follicle treatment period of time in a hair follicle treatment concentration and temperature or (d) a mammalian epidermis surface over a mammalian epidermis surface treatment period of time in a mammalian epidermis surface treatment concentration and temperature;
- v. providing treatment means for enabling treatment of said fabrics, mammalian epidermis, hair follicles or said solid surfaces;
- vi. introducing (a) said aqueous composition; (b) said at least one fabric article, hair follicle, mammalian epidermis or solid surface; and (c) said third plurality of polymer particles into said treatment means;

- vii. engaging said treatment means for a treatment period of time at a treatment temperature;
- viii. disengaging said treatment means;
- ix. removing (a) said at least one fabric article or (b) said at least one solid surface or (c) said at least one hair follicle or (d) said mammalian epidermis from said treatment means;
  - x. rinsing (a) said at least one fabric article or (b) said at least one solid surface or(c) said at least one hair follicle or (d) said mammalian epidermis; and
- x. drying (a) said at least one fabric article or (b) said at least one solid surface or (c) said at least one hair follicle or (d) said mammalian epidermis

wherein each of the fragrance components of the fragrance compositions and each of the malodour molecules is compatible with the polymers which compose each of the infrastructures of each of the polymer particles.

- 20. The process of claim 19 wherein the treatment means is a laundry washing machine, and the process is for imparting an aesthetically-pleasing fragrance to and substantially removing a perceived malodour from aqueous surfactant-containing composition-treated fabrics.
- 21. The process of claim 19 wherein said treatment is a cleaning treatment.

22. The process of claim 19 operated according to the mathematical model system:

$$m_{P} \int_{0}^{\theta} \left( \frac{\partial C_{P}}{\partial \theta} \right)_{C_{S}, C_{W}} d\theta + m_{W} \int_{0}^{\theta} \left( \frac{\partial C_{W}}{\partial \theta} \right)_{C_{P}, C_{S}} d\theta + m_{S} \int_{0}^{\theta} \left( \frac{\partial C_{S}}{\partial \theta} \right)_{C_{P}, C_{W}} d\theta = C_{T} m_{T} \text{ for the fragrance}$$

composition; and

$$\sum_{i=1}^{n} \left( m_p C_{pi} + m_{wi} C_{wi} + m_s C_{si} \right) = C_T m_T \text{ for "n" individual fragrance components wherein } 1 \le i \le n ;$$

wherein  $\theta$  represents time in hours;

wherein C<sub>P</sub> represents the fragrance concentration in the polymer particle in grams/liter;

wherein  $\frac{\partial C_p}{\partial \theta}$  represents the partial derivative of fragrance concentration in the polymer particle with respect to time, measures in grams/liter-hour;

wherein C<sub>W</sub> represents the fragrance concentration in the water phase in grams/liter;

wherein  $\frac{\partial C_w}{\partial \theta}$  represents the partial derivative of fragrance concentration in the water phase with respect to time measured in grams/liter-hour;

wherein C<sub>S</sub> represents the fragrance concentration in the surfactant phase in grams/liter;

wherein  $\frac{\partial C_S}{\partial \theta}$  represents the partial derivative of fragrance concentration in the surfactant phase with respect to time measured in grams/liter-hour;

wherein  $C_T$  represents the total concentration of fragrance in the system in grams/liter; wherein  $m_P$  represents the mass of the polymer particles in grams;

wherein ms represents the surfactant mass in grams;

wherein mw represents the water mass in grams; and

wherein  $m_T$  represents the total system mass in grams with all terms being measured at a point in time,  $\theta$ .

-48-

23. The process of claim 22 wherein in the mathematical model:

$$m_{P} \int_{0}^{\theta} \left( \frac{\partial C_{P}}{\partial \theta} \right)_{C_{S}, C_{W}} d\theta + m_{W} \int_{0}^{\theta} \left( \frac{\partial C_{W}}{\partial \theta} \right)_{C_{P}, C_{S}} d\theta + m_{S} \int_{0}^{\theta} \left( \frac{\partial C_{S}}{\partial \theta} \right)_{C_{P}, C_{W}} d\theta = C_{T} m_{T}$$

$$C_P = -k_1 LN(\theta+1) + k_2$$
 with  $0.015 \ge k_1 \ge 0.03$  and  $0.18 \ge k_2 \ge 0.22$ ;

$$C_S = k_3 LN(\theta+1) + k_4$$
 with 1.5 x  $10^{-3} \ge k_3 \ge 2.2$  x  $10^{-3}$  and 1.2 x  $10^{-4} \ge k_4 \ge 2.0$  x  $10^{-4}$  ; and

$$C_W = k_5 LN(\theta+1) + k_6$$
  
with 1.5 x  $10^{-6} \ge k_5 \ge 3.0$  x  $10^{-6}$  and 1.5 x  $10^{-7} \ge k_6 \ge 3.0$  x  $10^{-7}$ .

24. The process of claim 19 wherein the liquid phase fragrance material is selected from the group consisting of dihydromyrcenol, p-t-butyl-α-methylhydrocinnamaldehyde, a mixture of hexahydro-4,7-methanoinden-5-yl acetate and hexahydro-4,7-methanoinden-6-yl acetate, 2,4-dimethyl-3-cyclohexene-1-carboxaldehyde, 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one, n-hexyl salicylate, the methyl ester of 3-oxo-2-n-pentylcyclopentane acetic acid and α-methyl-3,4-methylenedioxyhydrocinnamaldehyde, the ethylene-vinyl acetate copolymer contains 65-75% ethylene moieties and 25-35% vinyl acetate moieties, the fragrance composition component free energies of mixing in the ethylene-vinyl acetate copolymer is in accordance with Figure 8 and the fragrance composition component free energies of mixing in the ethyl cellulose polymer is in accordance with Figure 12.

25. The process of claim 24 operated according to the mathematical model system:

$$m_{P} \int_{0}^{\theta} \left( \frac{\partial C_{P}}{\partial \theta} \right)_{C_{S}, C_{W}} d\theta + m_{W} \int_{0}^{\theta} \left( \frac{\partial C_{W}}{\partial \theta} \right)_{C_{P}, C_{S}} d\theta + m_{S} \int_{0}^{\theta} \left( \frac{\partial C_{S}}{\partial \theta} \right)_{C_{P}, C_{W}} d\theta = C_{T} m_{T} \text{ for the fragrance}$$

composition; and

$$\sum_{i=1}^{n} \left( m_p C_{pi} + m_{wi} C_{wi} + m_s C_{si} \right) = C_T m_T \text{ for "n" individual fragrance components wherein } 1 \le i \le n ;$$

wherein  $\theta$  represents time in hours;

wherein C<sub>P</sub> represents the fragrance concentration in the polymer particle in grams/liter;

wherein  $\frac{\partial C_p}{\partial \theta}$  represents the partial derivative of fragrance concentration in the polymer particle with respect to time, measures in grams/liter-hour;

wherein C<sub>W</sub> represents the fragrance concentration in the water phase in grams/liter;

wherein  $\frac{\partial C_w}{\partial \theta}$  represents the partial derivative of fragrance concentration in the water phase with respect to time measured in grams/liter-hour;

wherein C<sub>S</sub> represents the fragrance concentration in the surfactant phase in grams/liter;

wherein  $\frac{\partial C_S}{\partial \theta}$  represents the partial derivative of fragrance concentration in the surfactant phase with respect to time measured in grams/liter-hour;

wherein C<sub>T</sub> represents the total concentration of fragrance in the system in grams/liter;

wherein m<sub>P</sub> represents the mass of the polymer particles in grams;

wherein m<sub>S</sub> represents the surfactant mass in grams.;

wherein  $m_W$  represents the water mass in grams; and

wherein  $m_T$  represents the total system mass in grams with all terms being measured at a point in time,  $\theta$ .

26. The process of claim 25 wherein in the mathematical model:

$$m_{P} \int_{0}^{\theta} \left( \frac{\partial C_{P}}{\partial \theta} \right)_{C_{S}, C_{W}} d\theta + m_{W} \int_{0}^{\theta} \left( \frac{\partial C_{W}}{\partial \theta} \right)_{C_{P}, C_{S}} d\theta + m_{S} \int_{0}^{\theta} \left( \frac{\partial C_{S}}{\partial \theta} \right)_{C_{P}, C_{W}} d\theta = C_{T} m_{T}$$

$$C_P = -k_1 LN(\theta+1) + k_2$$
 with  $0.015 \ge k_1 \ge 0.03$  and  $0.18 \ge k_2 \ge 0.22$ ;

$$C_S = k_3 LN(\theta+1) + k_4$$
  
with 1.5 x  $10^{-3} \ge k_3 \ge 2.2$  x  $10^{-3}$  and 1.2 x  $10^{-4} \ge k_4 \ge 2.0$  x  $10^{-4}$ ; and

$$C_W = k_5 LN(\theta+1) + k_6$$
  
with 1.5 x  $10^{-6} \ge k_5 \ge 3.0$  x  $10^{-6}$  and 1.5 x  $10^{-7} \ge k_6 \ge 3.0$  x  $10^{-7}$ .

- 27. An aqueous treatment composition comprising a plurality of polymer particles (a) having a volume average diameter of from about 0.01 microns to about 1000 microns; (b) having a solid or viscoelastic infrastructure which is composed of a substance selected from the group consisting of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units, an ethylcellulose polymer, a polystyrene polymer and a polymethyl methacrylate polymer, each of said polymers having a number average molecular weight of from about 8000 to about 1 x 10<sup>6</sup> and (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure surrounding a free volume; suspended in an aqueous composition comprising from about 1% to about 25% by weight of at least one surfactant.
- 28. The composition of claim 27 wherein the free volume of the polymer contains a fragrance composition, each of the components of which is compatible with said polymer.
- 29. The composition of claim 27 wherein the plurality of polymer particles comprises (a) particles having infrastructures composed of ethylene-vinyl acetate copolymers and (b) particles having infrastructures composed of ethyl cellulose.

- 30. The composition of claim 29 wherein the free volumes of the ethylene-vinyl acetate polymer particles and the ethylcellulose particles each contain fragrance compositions, the components of which are each compatible with said ethyl cellulose and said ethylene-vinyl acetate copolymer.
- 31. A process for imparting an aesthetically-pleasing substantive fragrance to, and/or substantially removing or covering a perceived malodour from one or more solid or semi-solid surfaces comprising the steps of:
  - i. providing a plurality of solid and/or viscoelastic polymer particles (a) having a volume average diameter of from about 0.01 microns to about 1000 microns;
    (b) having a solid infrastructure which is composed of a substance selected from the group consisting of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units, an ethylcellulose polymer, a polystyrene polymer and a polymethyl methacrylate polymer, each of said polymers having a number average molecular weight of from about 8000 to about 1 x 10<sup>6</sup> and (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure surrounding a free volume;
    - ii. optionally including in the solid or viscoelastic infrastructure free volume a fragrance composition, each of the components of which is compatible with said polymer;
    - iii. effecting deposition of said plurality of polymer particles onto said surface

wherein fragrance components and malodour molecules are compatible with said polymer.

- 32. The process of claim 1 wherein each of the infrastructures of each of the polymer particles comprises, in addition, a solvent.
- 33. The process of claim 32 wherein the solvent is selected from the group consisting of isopropyl myristate, diethyl phthalate, dibutyl phthalate, diisopropyl adipate, benzyl benzoate, mineral oil, a methyl ester of a vegetable-derived  $C_{12}$ — $C_{18}$  carboxylic acid and a glyceryl ester of a vegetable-derived  $C_{10}$  carboxylic acid.
- 34. The process of claim 19 wherein each of the infrastructures of each of the polymer particles comprises, in addition, a solvent.
- 35. The process of claim 34 wherein the solvent is selected from the group consisting of isopropyl myristate, diethyl phthalate, dibutyl phthalate, diisopropyl adipate, benzyl benzoate, mineral oil, a methyl ester of a vegetable-derived  $C_{12}$ – $C_{18}$  carboxylic acid and a glyceryl ester of a vegetable-derived  $C_{10}$  carboxylic acid.
- 36. The process of claim 31 wherein each of the infrastructures of each of the polymer particles comprises, in addition, a solvent.
- 37. The process of claim 36 wherein the solvent is selected from the group consisting of isopropyl myristate, diethyl phthalate, dibutyl phthalate, diisopropyl adipate, benzyl benzoate, mineral oil, a methyl ester of a vegetable-derived  $C_{12}$ – $C_{18}$  carboxylic acid and a glyceryl ester of a vegetable-derived  $C_{10}$  carboxylic acid.
- 38. The process of claim 1 wherein each of the infrastructures of each of the polymer particles comprises, in addition, a filler.

- 39. The process of claim 38 wherein the filler is selected from the group consisting of SiO<sub>2</sub>, CaCO<sub>3</sub>, MgCO<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, MgO, ZnO, TiO<sub>2</sub>, surface-modified silicas, hydrated alkali metal-aluminum silicates, CaSO<sub>4</sub>.2H<sub>2</sub>O, clays, modified clays, wood flour and activated carbon.
- 40. The process of claim 19 wherein each of the infrastructures of each of the polymer particles comprises, in addition, a filler.
- 41. The process of claim 40 wherein the filler is selected from the group consisting of SiO<sub>2</sub>, CaCO<sub>3</sub>, MgCO<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, MgO, ZnO, TiO<sub>2</sub>, surface-modified silicas, hydrated alkali metal-aluminum silicates, CaSO<sub>4</sub>.2H<sub>2</sub>O, clays, modified clays, wood flour and activated carbon.
- 42. The process of claim 31 wherein each of the infrastructures of each of the polymer particles comprises, in addition, a filler.
- 43. The process of claim 42 wherein the filler is selected from the group consisting of SiO<sub>2</sub>, CaCO<sub>3</sub>, MgCO<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, MgO, ZnO, TiO<sub>2</sub>, surface-modified silicas, hydrated alkali metal-aluminum silicates, CaSO<sub>4</sub>.2H<sub>2</sub>O, clays, modified clays, wood flour and activated carbon.

- 44. A polymethyl methacrylate particle composition consisting of free volume-containing polymethyl methacrylate particles which are capable of absorbing compatible fragrance composition components and malodour molecules produced according to the process comprising the steps of:
  - (a) milling polymethyl methacrylate to provide polymethyl methacrylate
    particles having an average effective diameter in the range of from about 5
    microns to about 100 millimeters; and
  - (b) admixing the resulting milled particles with a plasticizing quantity of a plasticizing composition selected from the group consisting of lower alkanols and lower alkanones or greater than about 10% aqueous solutions thereof for a time period of from about 30 seconds to about 10 minutes thereby forming plasticized polymer particles.
- 45. The polymethyl methacrylate particle composition of claim 44 wherein in the process for producing said composition, the resulting plasticized polymer particles are admixed with a fragrance material which is compatible with the polymethyl methacrylate, whereby from about 0.5% to about 50% by weight of the filled particle of fragrance is absorbed into each of the free volumes of each of the polymer particles.
- 46. The polymethyl methacrylate particle composition of claim 44 wherein in the process for producing said composition, the resulting plasticized polymer particles are separated from the plasticizing compound, and the thus-separated particles are then admixed with a fragrance material which is compatible with the polymethyl methacrylate, whereby from about 0.5% to about 50% by weight of the filled particle of fragrance is absorbed into each of the free volumes of each of the polymer particles.

- 47. The composition of claim 27 wherein the infrastructure of each of a plurality of the polymeric particles is composed of polymethyl methacrylate and wherein the polymethyl methacrylate polymer particles are produced according to the process comprising the steps of:
  - (a) milling polymethyl methacrylate to provide polymethyl methacrylate particles having an average effective diameter in the range of from about 5 microns to about 100 millimeters.; and
  - (b) admixing the resulting milled particles with a plasticizing quantity of a plasticizing compound selected from the group consisting of lower alkanols and lower alkanones or greater than 10% aqueous solutions thereof for a time period of from about 30 seconds to about 10 minutes thereby forming plasticized polymer particles.
- 48. The composition of claim 47 wherein in the process for producing the polymethyl methacrylate polymer particle composition, the resulting plasticized polymer particles are admixed with a fragrance material which is compatible with the polymethyl methacrylate, whereby from about 0.5% to about 50% by weight of the filled particle of fragrance is absorbed into each of the free volumes of each of the polymer particles.
- 49. The composition of claim 47 wherein in the process for producing the polymethyl methacrylate polymer particle composition, the resulting plasticized polymer particles are separated from the plasticizing compound, and the thus-separated particles are then admixed with a fragrance material which is compatible with the polymethyl methacrylate, whereby from about 0.5% to about 50% by weight of the filled particle of fragrance is absorbed into each of the free volumes of each of the polymer particles.

- 50. The process of claim 1 wherein at least a finite portion of the polymeric particles are polymethyl methacrylate polymer particles produced according to the process comprising the steps of:
  - (a) milling polymethyl methacrylate to provide polymethyl methacrylate
    particles having an average effective diameter in the range of from about 5
    microns to about 100 millimeters; and
  - (b) admixing the resulting milled particles with a plasticizing quantity of a plasticizing compound selected from the group consisting of lower alkanols and lower alkanones or greater than about 10% aqueous solutions thereof for a time period of from about 30 seconds to about 10 minutes thereby forming plasticized polymer particles.
- 51. The process of claim 31 wherein at least a finite portion of the polymeric particles are polymethyl methacrylate polymer particles produced according to the process comprising the steps of:
  - (a) milling polymethyl methacrylate to provide polymethyl methacrylate particles having an average effective diameter in the range of from about 5 microns to about 100 millimeters.; and
  - (b) admixing the resulting milled particles with a plasticizing quantity of a plasticizing compound selected from the group consisting of lower alkanols and lower alkanones or greater than about 10% aqueous solutions thereof for a time period of from about 30 seconds to about 10 minutes thereby forming plasticized polymer particles.

- 52. The process of claim 50 wherein in the process for producing the polymethyl methacrylate polymer particle composition, the resulting plasticized polymer particles are separated from the plasticizing compound, and the thus-separated particles are then admixed with a fragrance material which is compatible with the polymethyl methacrylate, whereby from about 0.5% to about 50% by weight of the filled particle of fragrance is absorbed into each of the free volumes of each of the polymer particles.
- 53. The process of claim 51 wherein in the process for producing the polymethyl methacrylate polymer particle composition, the resulting plasticized polymer particles are separated from the plasticizing compound, and the thus-separated particles are then admixed with a fragrance material which is compatible with the polymethyl methacrylate, whereby from about 0.5% to about 50% by weight of the filled particle of fragrance is absorbed into each of the free volumes of each of the polymer particles.
- 54. The polymethyl methacrylate particle composition of claim 44 wherein in the process for producing the particles, the plasticizing composition is an aqueous solution of ethanol.
- 55. The composition of claim 48 wherein in the process for producing the particles, the plasticizing composition is an aqueous solution of ethanol.
- 56. The process of claim 52 wherein in the process for producing the particles, the plasticizing composition is an aqueous solution of ethanol.
- 57. The polymethyl methacrylate composition of claim 54 wherein in the process for producing the particles, the plasticizing composition is 50% aqueous ethanol.
- 58. The composition of claim 48 wherein in the process for producing the particles, the plasticizing composition is a 50% aqueous solution of ethanol.
- 59. The process of claim 52 wherein in the process for producing the particles, the plasticizing composition is a 50% aqueous solution of ethanol.